

# **V900 GSM REMOTE CAMERA**

## **V900-B2**

### **Technical Specification**

**Version V2.0**

**XIAMEN YOUTHNET CO., LTD.**

**Amend record:**

Version	Status	Date	Authority	Amendment	Remark
V1.0		2008-10-5			Original version
V2.0		2009-5-8			

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## 1 General introduction

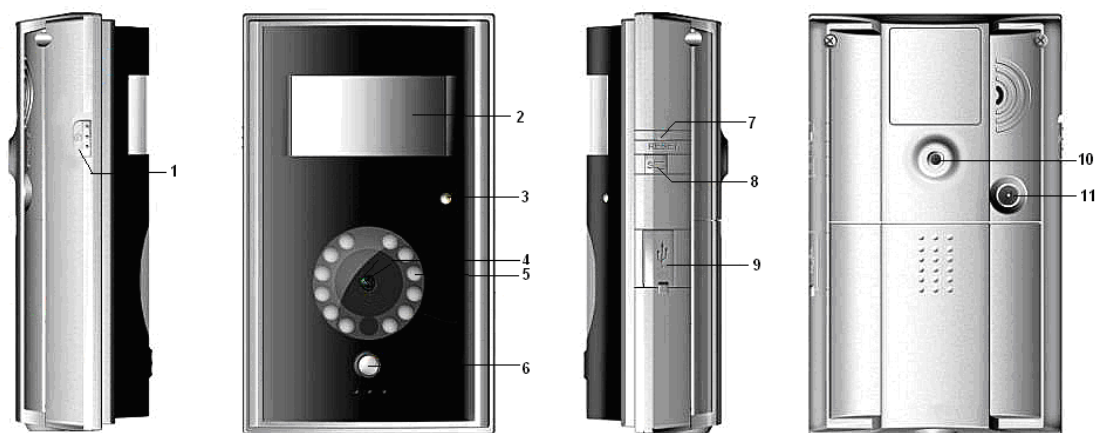
V900 GSM remote camera is one of simple image capturing device for GSM network, it has fashion appearance, compact design, wireless system and easy to use. Build-in lithium battery makes it work when external power cut off. You can control the camera by SMS command to get MMS images. V900 integrated motion detection and GSM wireless transmit technology to apply in security field, truly achieved wireless security system; user can see the alarm images in first time.

MODEL	FREQUENCY	REMARK
V900 GSM remote camera	900MHz/1800MHz (850MHz/ 1900MHz Optional)	Images monitor, Real time audio

## 2 Acronyms

ACRONYMS	FULL DESCRIPTION
YOUTHNET	XIAMEN YOUTHNET CO., LTD.
GPRS	General Packet Radio Service
GSM	Global System of Mobile communication
ESD	Electronic Static Discharge
EMC	Electro Magnetic Compatibility
EMI	Electro Magnetic Interference
DTMF	Dual Tone Multi-Frequency

### 3 Appearance and Structure



- |                            |                                       |
|----------------------------|---------------------------------------|
| 1. Power switch            | 8. Set key                            |
| 2. Infrared body detector  | 9. Mini USB (rubber cover)            |
| 3. Indicator               | 10. Hanging hole 1                    |
| 4. Camera                  | 11. Power Interface                   |
| 5. Infrared lights (12pcs) | 12. Back board (SIM card Slot inside) |
| 6. Mirror and Microphone   | 13. Hanging hole 2                    |
| 7. Reset key               |                                       |

**Image 3-1 Host appearance**

- ◆ Host dimension (L x W x H): 125x75x43(mm)
- ◆ Weight:186g
- ◆ Host materials: ABS
- ◆ Power interface: DC interface
- ◆ Data interface: USB Cable (mini)

### 4 Functions

**Table 4-1 Basic function list**

Item	Description
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Images monitor	300,000 pixels camera, support infrared light to capture images at night, images send to mobile phone via MMS.
Listen to live voice	Listen to live voice of monitoring area with mobile phone.
Remote control via SMS commands	The user sending SMS command to change V900 setting.
Motion detection	V900 support motion detection. When the motion be detected, V900 will send out alarm message via SMS, MMS or standard calling.
Support external sensor	A maximum of 15pcs 315Mhz/433MHz wireless sensors can be supported by V900, such as door sensor, PIR, gas detector etc. These loaded sensors can trigger the V900 sending out the alarm message.
Interface	Mini USB
Infrared body detector	Build-in PIR sensor can detect any intruder in the monitoring area.

## 5 Technical specifications

### 5.1 Transmit protocol and technical standard

**Table 5-1 Transmit protocol and technical standard**

<b>Access way</b>	GSM
<b>Technical standard</b>	GSM phase 2/2+ (including data service)
<b>Interval frequency of Transmitter / receiver</b>	45MHz for GSM 850 45MHz for EGSM 900 95MHz for DCS 1800 80MHz for PCS 1900
<b>Voice code</b>	Half rate (HR) Full rate (FR) Enhanced Full rate (EFR)

	Adaptive Multi-Rate (AMR)
Voice band	8 kHz & 16 kHz Voiceband Codec

## 5.2 Frequency

Table 5-2 Frequency

Name	Transmitter frequency(MHz)	Receiver frequency(MHz)
GSM 850	824~849 MHz	869~894MHz
EGSM 900	880~915 MHz	925~960MHz
DCS 1800	1710~1785MHz	1805~1880MHz
PCS 1900	1850~1910MHz	1930~1990MHz

## 5.3 Power consumption

Table 5-3 Power consumption

Item	Description
Typical power consumption during talk	0.6w
Power consumption in idle mode	0.1w
Currency during talk	120mA
Currency at idle mode	20mA

## 5.4 Accessory Specification

Table 5-4 Accessory

Item	Description	Remark
Power adapter	Input 100V~240V/50Hz Output 6VDC/2A	
Battery	Lithium batter 3.7V/800mAh	1700mAh optional
	Battery standby: 12 hours	
Camera	300,000 pixels CMOS	Inner
	Degree: 68 (horizontal), 68 (vertical)	
	Maximum shooting distance at night: 8 m	

	Image file format: JPEG	
	Image size: 160×128、QVGA(320×240)、VGA(640×480)	
Wireless sensor (Including)	Receiver code: ASK Baud range: 500-2500 bps, 12 bit, 0 parity, 1 stop bit, 8 stop bit.	External wireless sensors are optional.
	Receiver frequency: 315/433 MHz	
	Maximum quantity of remote control: 5pcs	
	Maximum quantity of External wireless sensors: 15pcs	
	Maximum detect distance of build-in PIR sensor: 9 m	
	Valid distance: 25 m (Without block)	
Microphone	Listen in distance: 6 m (Maximum)	
Buzzer	Buzzer alarm supported	

## 5.6 Antenna

Voltage standing wave rate	1.5
Antenna plus	1dB
Input impedance	50 ohm
Polarization mode	vertical

## 5.7 Working conditions

- ◆ Working temperature: -10℃ ~+ 45℃
- ◆ Storage temperature: -20℃ ~+ 60℃
- ◆ Relative humidity: 10-90% without coagulate



## **6 EMC Test standard**

### **6.1 ESD Test**

Test level

- ◆ Contact discharge:  $\pm 8\text{KV}$
- ◆ Air discharge:  $\pm 15\text{KV}$
- ◆ Refer standard: GB/T 17626.2(China)

### **6.2 Immunity Test of Radiation from Radio Frequency**

#### **Electromagnetic Field**

Test level:

- ◆ Field strength:  $10\text{V/m}$
- ◆ Frequency range:  $80\text{-}1000\text{MHz}$
- ◆ Refer standard: GB/T 17626.3(China)

### **6.3 RF Emission Test**

- ◆ Detector: Peak detector, Quasi-peak detector
- ◆ Refer Standard: GB 9254(China)

### **6.4 Conducted Emission Test**

- ◆ Detector: Peak detector, Quasi-peak detector, Average detector
- ◆ Refer Standard: GB 9254(China)